

Fig. 1

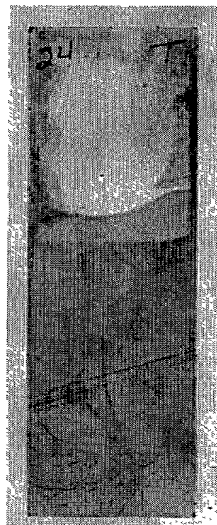


Fig. 2



Fig. 3A

Fig. 3B

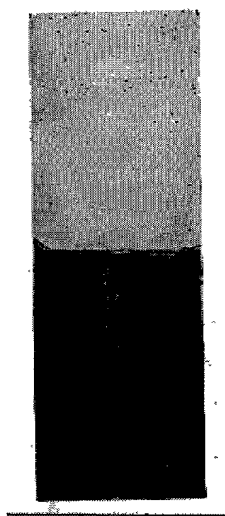


Fig. 4

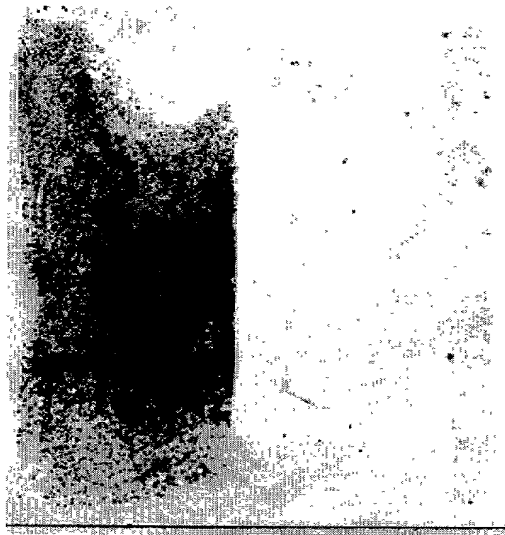


Fig. 5A

Fig. 5B

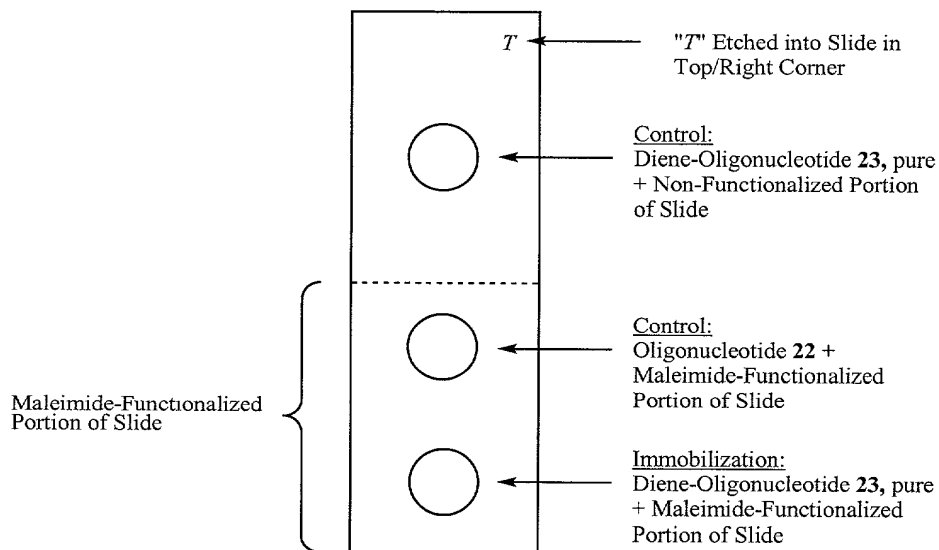


Fig. 6

Placement of Solutions:

Control:  
 Diene-Oligonucleo-  
 tide **23**, pure +  
 Non-Functionali-  
 zed Portion of Slide

Control:  
 Oligonucleotide **22** +  
 Maleimide-Functiona-  
 lized Portion of Slide

DA Surface  
Immobilization:  
 Diene-Oligonucleoti-  
 de **23**, pure +  
 Maleimide-Functiona-  
 lized Portion of  
 Slide

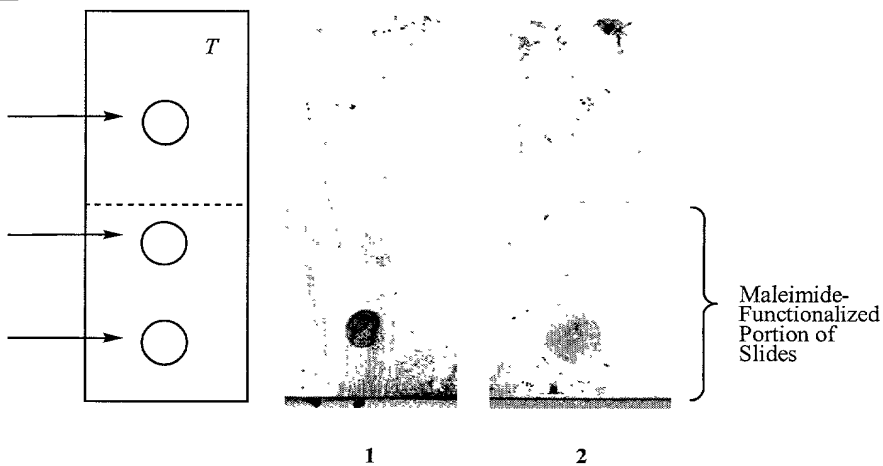


Fig. 7

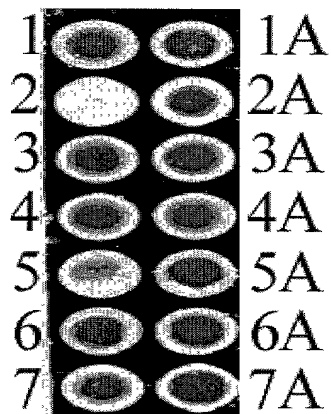


Fig. 8

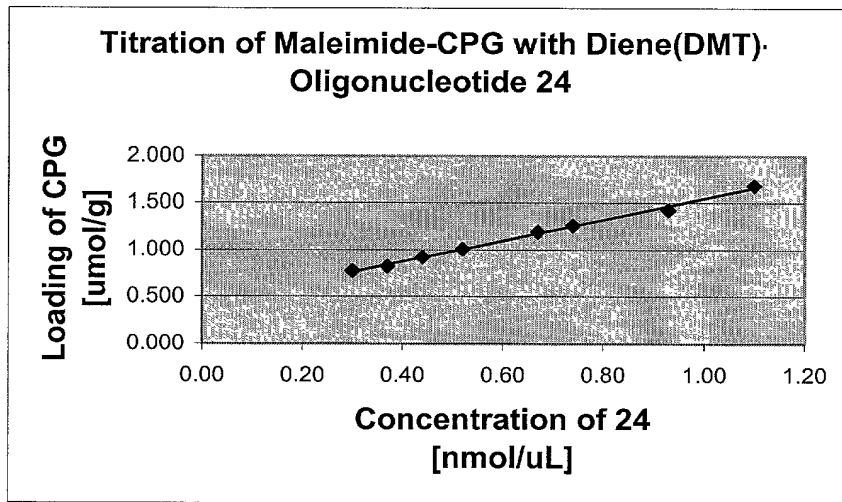


Fig. 9

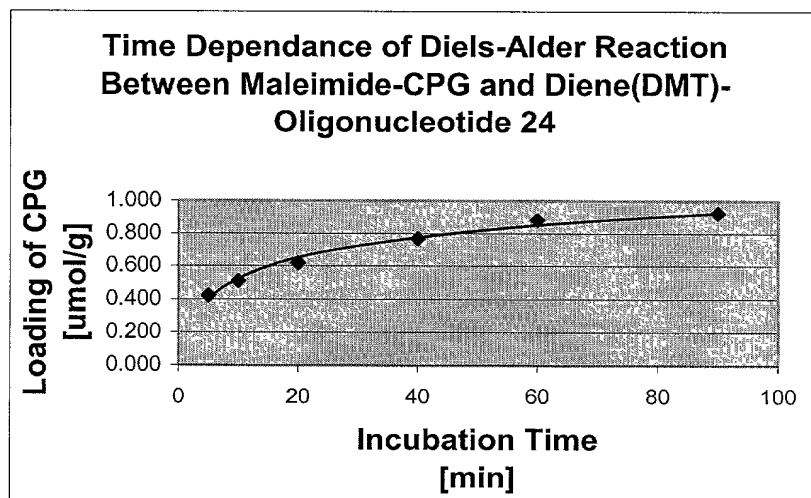


Fig. 10

Placement of Solutions:

Control:

Maleimide-Oligonucleotide  
 26 + Non-Functionalized  
 Portion of Slide

Control:

Oligonucleotide 22 +  
 Diene-Functionalized  
 Portion of Slide

DA Surface Immobilization:

Maleimide-Oligonucleotide  
 26 + Diene-Functionalized  
 Portion of Slide

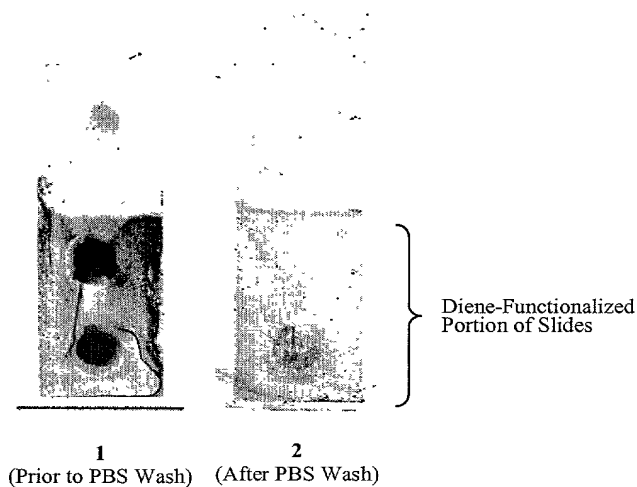
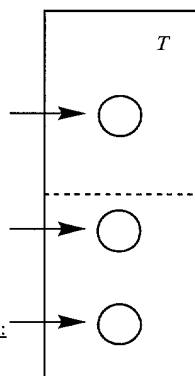
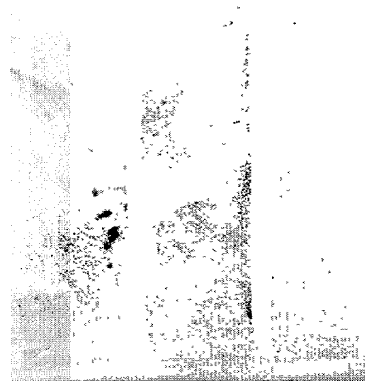
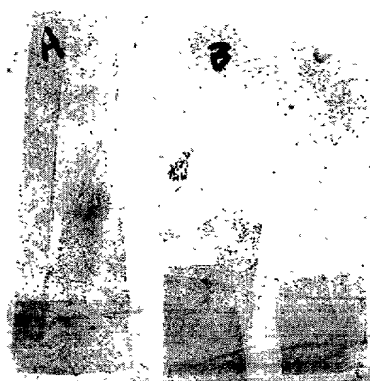


Fig. 11



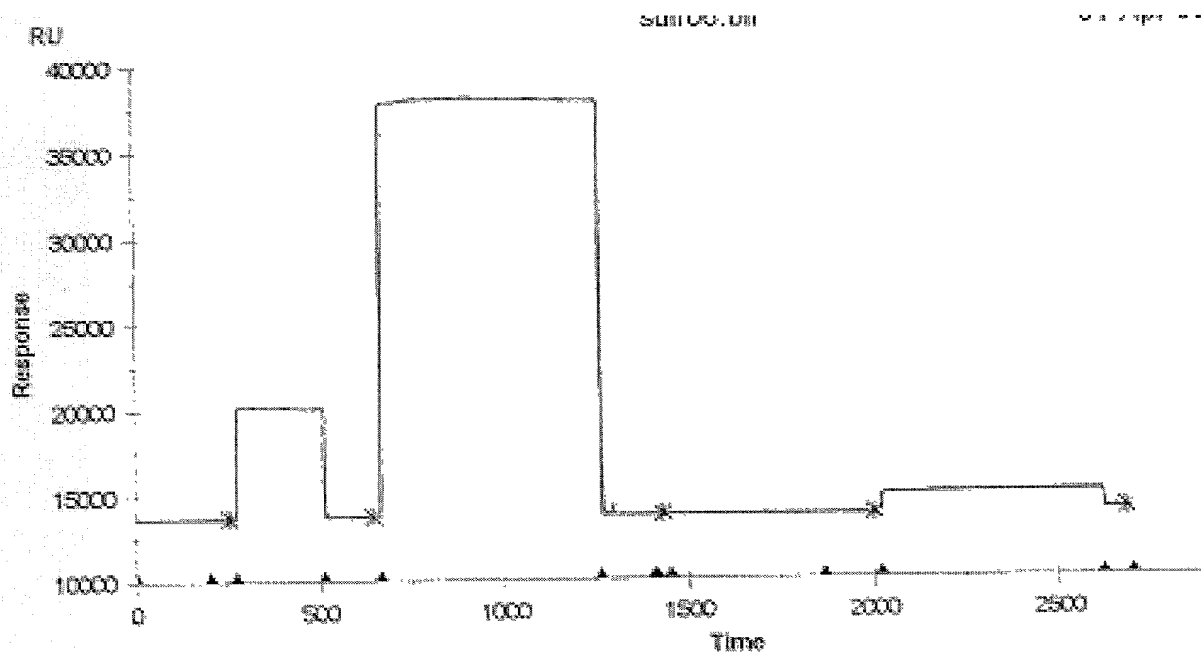
1A 1B 1C  
 (Prior to SSC Wash)



2A 2B 2C  
 (After SSC Wash)

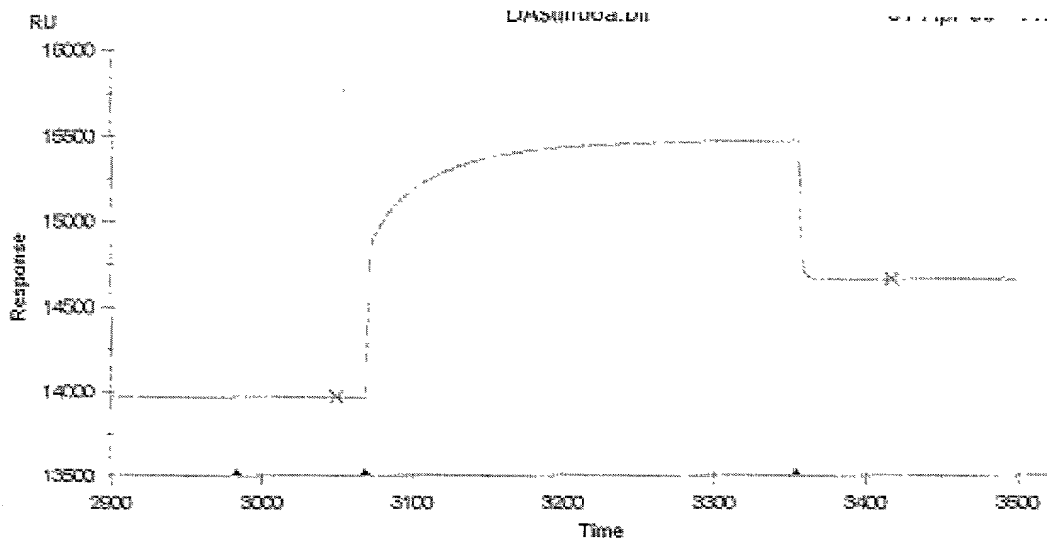
Fig. 12A

Fig. 12B



Fc	APROG	Time	AbsResp	Slope	Baseline	RelResp	Id
1	immobilization	252.5	13654.6	0.08	Yes	0	baseline
2	immobilization	252.6	13709.9	0.04	Yes	0	baseline
3	immobilization	252.7	13751.5	-0.04	Yes	0	baseline
4	immobilization	252.8	13736.4	0.12	Yes	0	baseline
1	immobilization	642.5	13721.9	0.00	Yes	67.3	NHS
2	immobilization	642.6	13770.9	0.07	Yes	61.0	NHS
3	immobilization	642.7	13813.7	-0.04	Yes	62.2	NHS
4	immobilization	642.8	13799.1	-0.08	Yes	62.7	NHS
1	immobilization	1430.5	13786.3	-0.03	Yes	64.4	ethylenediamine
2	immobilization	1430.6	13847.8	0.01	Yes	76.9	ethylenediamine
3	immobilization	1430.7	13894.7	-0.01	Yes	81.0	ethylenediamine
4	immobilization	1430.8	13882.8	-0.01	Yes	83.7	ethylenediamine
1	immobilization	2001.5	13782.4	0.05	Yes	-4.0	ethylenediamine
2	immobilization	2001.6	13842.8	0.03	Yes	-5.1	ethylenediamine
3	immobilization	2001.7	13888.6	-0.02	Yes	-6.1	ethylenediamine
4	immobilization	2001.8	13876.1	0.01	Yes	-6.7	ethylenediamine
1	immobilization	2681.5	13940.8	1.63	No	158.4	maleimide_level
2	immobilization	2681.6	13994.6	0.90	No	151.8	maleimide_level
3	immobilization	2681.7	14042.9	0.25	No	154.2	maleimide_level
4	immobilization	2681.8	14040.0	-0.33	No	164.0	maleimide_level

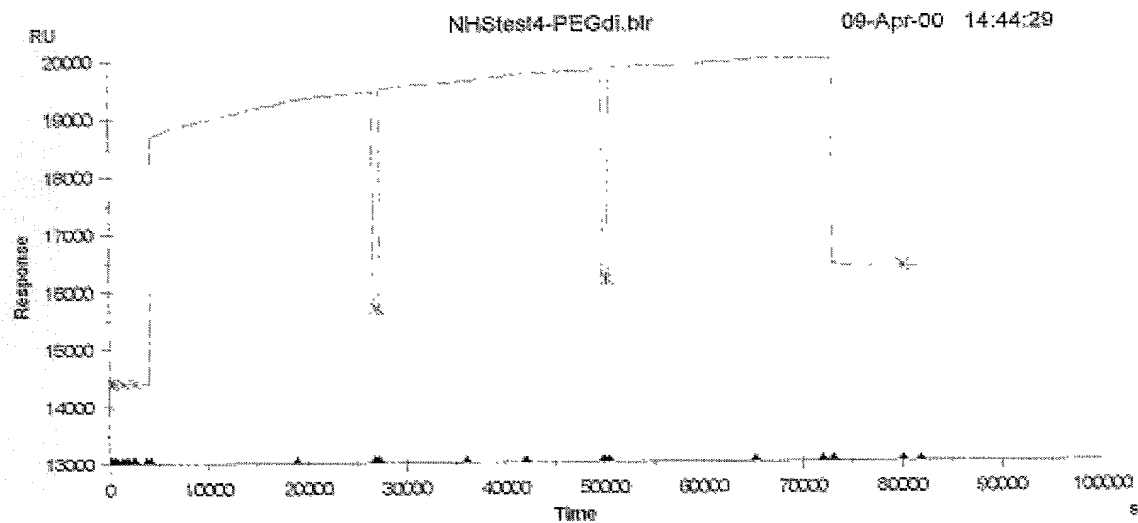
Fig. 13



Fc	Time	AbsResp	Slope	Baseline	RelResp	Id
1	279.5	13922.6	-0.18	Yes	0	maleimide baseline
1	3416.5	14860.0	-0.06	No	737.4	5000-PEG-SH pH 6.5 added

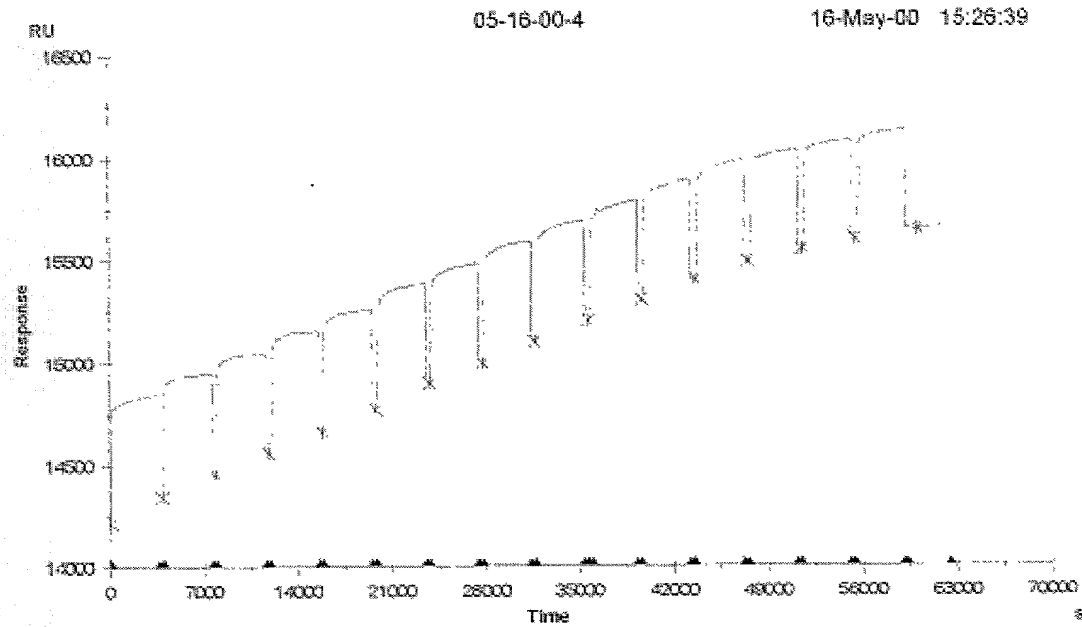
Fig. 14





Fc	Time	AbsResp	Slope	Baseline	RelResp	Id
4	100.5	14414.7	-0.01	Yes	0	maleimide baseline
4	448.5	14413.4	-0.01	No	-1.3	500nM 22-070diene pH 6.5
4	1388.5	14409.8	-0.01	No	-4.9	5500 nM 22070 10 uL/min
4	2600.5	14407.3	-0.01	No	-7.4	5 uM 22-070-diene pH 6.5
4	26984.5	15697.7	-0.03	No	1283.0	7.5 mM 5K-diene pH 6.5 DA1 added
4	50200.5	16181.7	0.22	No	1767.0	7.5 mM 5K-diene pH 6.5 DA2 added
4	80000.5	16395.9	-0.01	No	1981.2	7.5 mM 5K-diene pH 6.5 DA3 added

Fig. 15



Fc	Time	AbsResp	Slope	Baseline	RelResp	Id
4	120.5	14211.3	0.06	Yes	0	maleimide baseline
4	3960.5	14343.4	-0.18	No	132.1	5K-PEG-Anth 1 hr
4	7960.5	14447.3	-0.04	No	235.9	5K-PEG-Anth 2 hr
4	11876.5	14551.6	-0.34	No	340.3	5K-PEG-Anth 3 hr
4	15826.5	14657.0	0.77	No	445.6	5K-PEG-Anth 4 hr
4	19810.5	14765.0	-0.09	No	553.7	5K-PEG-Anth 5 hr
4	23856.5	14894.7	0.00	No	683.4	5K-PEG-Anth 6 hr
4	27806.5	14992.8	-0.02	No	781.5	5K-PEG-Anth 7 hr
4	31730.5	15096.7	-0.05	No	887.4	5K-PEG-Anth 8 hr
4	35690.5	15198.9	-0.01	No	987.5	5K-PEG-Anth 9 hr
4	39614.5	15301.6	-0.22	No	1090.3	5K-PEG-Anth 10 hr
4	43612.5	15402.8	-0.16	No	1191.5	5K-PEG-Anth 11 hr
4	47572.5	15492.6	0.03	No	1281.3	5K-PEG-Anth 12 hr
4	51572.5	15550.1	0.04	No	1338.7	5K-PEG-Anth 13 hr
4	55500.5	15599.5	0.04	No	1388.2	5K-PEG-Anth 14 hr
4	60070.5	15647.1	-0.01	No	1435.8	5K-PEG-Anth 15 hr

Fig. 16

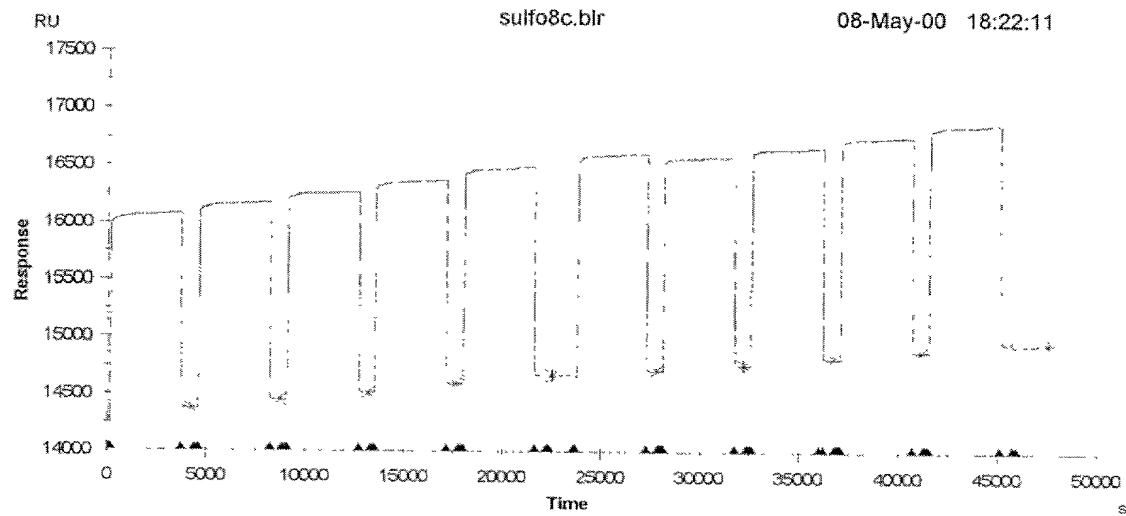


Fig. 17

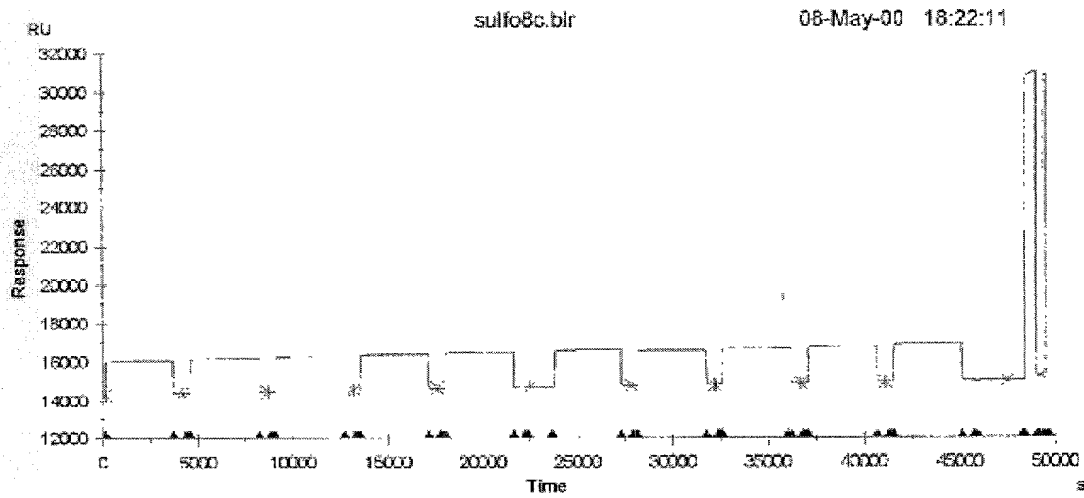


Fig. 18

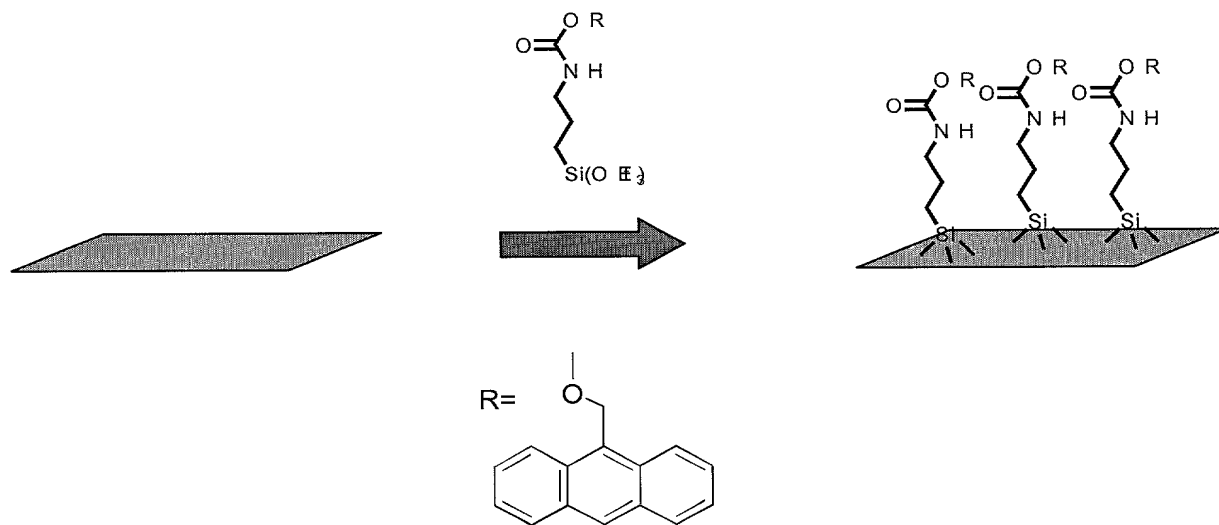


Fig. 19